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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,531	01/23/2004	Tony Hulkkonen	059643.00361	5351

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EXAMINER
D AGOSTA, STEPHEN M

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/762,531	HULKKONEN ET AL.
	Examiner	Art Unit	
	Stephen M. D'Agosta	2617	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 October 2008</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,2,6,7,11,13-18,20,21,26,30,32-36,40 and 42-49</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1,2,6,7,11,13-18,20,21,26,30,32-36,40 and 42-49</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

The examiner has reconsidered his position and puts forth a new rejection below.

1. Note that the "indication" can be a person dialing or the network receiving a "911" call, which would be used to override the denial of service since an emergency has occurred.

2. Also, please find several USC 101 and USC 112 1st paragraph issues with the claims.

3. A more favorable outcome may occur if the applicant amends each independent claim with the following dependent claims:

Claim 1 + 11 + 13 + 14 + 16

It is the examiner's position that the prior art is very mature with regard to denial of service but allowing emergency calls to go through. Hence a more narrow claim is required for it to be novel over the prior art of record.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. **Claim(s) 1 and 35** is/are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C 101 must (1) be tied to another statutory category (such as a particular apparatus), or (s) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner fro Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C 101"). The instant claims neither transform underlying subject matter nor positively tie

to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

The applicant should add in concepts as to "what" is performing the method steps (eg. a receiver, a determiner, a disabler, an access element, etc.).

2. **Claim 18** rejected under 35 U.S.C. 101 because it discloses a computer program embodied on a computer readable medium yet the examiner could not find support for this design/implementation (eg. the computer readable medium).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 18 rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Support for the actual computer readable medium, critical or essential to the practice of the invention, is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The specification does not disclose the implementation or support for the program being embodied on a certain type of medium, which is required. Note that signals, waveforms, mediums, printed matter or algorithms are non-statutory (no additions to the specification are permitted).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as
set forth in section 102 of this title, if the differences between the subject matter sought to be patented
and the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 6-7, 11, 13-16, 17-18, 20-21, 26, 30, 32-33, 35-36, 42, 45-47

rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson et al. US

6,230,017 and further in view of Valentine et al. US 6,011,973 and (Hanson *OR* Block).

As per **claims 1, 18, 20, 35, 46-47 and 50,** Andersson teaches a method <u>in a

network comprising access and core networks (see figure 1a showing access/BTS's

and core/MSC's/Gateway/PSTN)</u>, comprising:

Receiving a network access request from a user equipment in a network (figure 3

shows a Call Origination Request #3-1 and Call Completions #3-3, #3-9, #3-22):

Determining if the network access request is an emergency call independence on

an indication, received from the user equipment or from the network, that the network

access request is an emergency call (figure 3, #3-2 shows determining if an emergency

number is dialed, eg. 911),

But is silent on

<u>Receipt of an indication from the core network (eg. that the call is an emergency

call)</u>

Disabling selective access to the network in response to determining that the

network access request is an emergency call and in response to detecting the

establishment of the radio access bearer;

Detecting establishment of a radio access bearer channel.

The examiner notes that Andersson fully teaches the concept of "denying

access" based on user location but overrides said access if the call is an emergency

call. Andersson's "difference" is seen in the actual steps/procedures he performs (eg.

he overrides the location determination if an emergency call is received). The examiner

notes that Andersson does allow for one skilled in the art to make "...various alterations

may be made without departing from the spirit and scope of the invention (C12, L1-5).

Similary, the examiner puts forth **Valentine** who determines the geographical

location of a mobile user first before allowing/denying operation of the mobile to

make/receive calls (Abstract, figure 3). Therefore the exact "steps" used are open to

modification (eg. Andersson doesn't first check location of user while Valentine does),

hence one would re-arrange said steps within the spirit and scope of these pieces of art

to arrive at the claimed inventive concept (eg. determine if emergency call, determine

location, process call based on location).

The examiner notes that "other" selective disabling methods are known which

deal with completely different parameters, eg. such as billing and credit where the user's

account is monitored for a non-zero balance and/or credit-worthiness).

a. Hanson teaches credit monitoring (C5, L25-51): However, if the call

is not permitted according to the customer credit profile

verification, the call is not completed except certain calls

such as those for emergency 911 or customer service. Further, if

certain restrictive conditions according to the credit profile

is met while in the middle of a call, the call is disconnected

immediately. For example, the length of the call may have caused

the customer to approach his/her pre-established credit limit,

therefore the call is terminated or the customer is given the

option of providing a credit card number to which to charge the

additional amounts over the credit limit to continue the call.

b. Block teaches monitoring for a user's balance and denying a call and/or

request for a channel if the balance is low/zero: The Channel Billing Monitor

20 also includes a relay switch 21 driven by a relay driver 27

as instructed by the Microprocessor 28a. For example, if the

subscriber does not have an adequate usable balance, the

Microprocessor 28a instructs the relay driver 27 to open the

switch 21 to disconnect Sub. n. For certain calls such as
emergency calls or calls to the service provider, the
Microprocessor 28a can instruct the relay driver 27 to close the
switch 21 and connect Sub. n. (figure 12b, step #12040 and C5,
L10-20)

 Note that both Hanson and Block disclose determining if an emergency call has
been placed. From the caller's perspective, they will dial "911" and the network
interprets that an emergency call is dialed and then allows the call to proceed (eg.
disables the "denial of service" based on the user's location). Hence the "core" and/or a
disabling unit, etc. would be responsible for determining "in dependence on receipt of an
indication received from the core" to enable/disable a call based on a) the user's
location and b) if an emergency call is being placed as taught by the prior art. Clearly at
least Valentine teaches either the phone or network performing the identification and
enable/disable function (C4, L54-65) which also means that this concept can be a
design choice and the **KSR ruling** would also be in effect.

 It would have been obvious to one skilled in the art at the time of the invention to
modify Andersson, such that it disables selective access to the network in response to
determining that the network access request is an emergency call and in response to
detecting the establishment of the radio access bearer AND detects establishment of a
radio access bearer channel, to provide means for only allowing emergency calls if a
user is denied service based on location, credit, balance, etc..

 With further regard to claims 18-19, Andersson teaches "computer
code/programs" being embodied by the implementation of figure 3 which requires
software code/programs running on a processor to perform the stated
operations/commands. Andersson and Valentine both teach denial of service based on
location.

 With further regard to claims 20 and 46, Andersson teaches various network
elements that are involved with the access/denial of calls to/from a mobile device based
on its current cell location. Furthermore, Andersson shows that the HLR/VLR stores
Allowed Cell lists and thus reads on a "network element".

 With further regard to claims 35 and 47, Andersson teaches a communication
system (see figure 1a).

 As per **claims 2 and 48-49,** Andersson teaches claim 1, wherein said receiving
includes receiving the network access information that comprises network area access
information (figures 2a thru 2d show "Allowed Cells List" which reads on which cells a
mobile can/can't access).

 As per **claims 6,** Andersson teaches claim 1/20, wherein said selectively
controlling includes selectively controlling the network which comprises an access
network and a core network (figures 2a-2d show access lists stored in the HLR to
control whether the network components, eg. access/core components, allow
in/outgoing calls to/from the mobile).

 As per **claim 7,** Andersson teaches claim 6, wherein the controlling and the
disabling the access to the network are performed in the access network (figures 2a-2d
show the HLR/VLR as storing the access control data which is used by the
MSC/BSC/BTS to allow/deny access).

 As per **claims 11 and 30,** Andersson teaches claim 10/29, wherein said
disabling includes disabling for a predetermined time period (figure 2d shows Restricted
Times, #116D and #118D, which provides a "time range" whereby calls are
allowed/denied, hence a time period is taught. A "timer" must be inherently used in
order to measure the elapsed time).

 As per **claims 12-13,** Andersson teaches claim 10, further comprising: detecting
establishment of a radio access bearer; and responsive thereto, activating the disabling
the selectively controlling access to the network for an emergency call network access
AND activating the disabling the selectively controlling access to the network only for
the emergency call network access associated with that radio access bearer. (See C9,
L59-67).

As per **claim 14,** Andersson teaches claim 10, further comprising: terminating said disabling responsive to a control signal (figure 3 shows that each-and-every call begins with a new call operation, hence a "control signal" must be utilized to "reset" the process of figure 3 so that the disablement is not turned on once and then left on. One skilled understands that control signals are used between the network elements to properly control the devices such that each call is identified as being "allowed or denied" and then checked to see if is an emergency call or not).

As per **claims 15 and 25-26,** Andersson teaches claim 6/20, further comprising: receiving the network access information from the core network (Similar to the rejection of claim 1, the examiner interprets that the Network Access information is inputted by a Network Admin and accessed/transmitted from the HLR/VLR to the appropriate network components, eg. MSC/BSC/BTS).

As per **claims 16, 36 and 42,** Andersson teaches claim 1/20/35, further comprising: detecting termination of an emergency call; and, responsive thereto, enabling the selectively controlling access to the network (figure 3 shows the process of a normal call and an emergency call being completed. The examiner notes that the "enabled/disabled control" process would be "reset" after each-and-every call).

As per **claims 17 and 45,** Andersson teaches claim 1/35, further comprising: performing the method in a mobile communication system (figure 1a) **but is silent on** a third generation partnership project.

Andersson does not limit himself to a certain type/generation of mobile network and allows for one skilled to modify various elements/methods within the spirit and scope of the invention (C12, L1-5).

The examiner takes **Official Notice** that 3GPP mobile networks are known in the art and provide similar services (eg. backward compatible) as those from previous generations. Hence one skilled would modify Andersson's patented concepts and apply them to future (eg. 3GPP) mobile networks.

It would have been obvious to one skilled in the art at the time of the invention to modify Andersson, such that 3GPP networks are supported, to provide means for supporting industry standards in new/future networks when they are rolled out.

As per **claim 21,** Andersson teaches claim 20, wherein the network access information is shared network area access information (Figures 1a thru 2d show that the access information is stored in a shared network element, eg. HLR/VLR).

As per **claim 25-26,** Andersson teaches claim 20, wherein said selectively controlling includes selectively controlling the network which comprises an access network and a core network (figures 2a-2d show access lists stored in the HLR to control whether the network components, eg. access/core components, allow in/outgoing calls to/from the mobile).

As per **claim 30,** Andersson teaches claim 29, wherein said disabling includes disabling for a predetermined time period (figure 2d shows Restricted Times, #116D and #118D, which provides a "time range" whereby calls are allowed/denied, hence a time period is taught. A "timer" must be inherently used in order to measure the elapsed time).

As per **claim 32,** Andersson teaches claim 25, further comprising: receiving the network access information from the core network (Similar to the rejection of claim 1, the examiner interprets that the Network Access information is inputted by a Network Admin and accessed/transmitted from the HLR/VLR to the appropriate network components, eg. MSC/BSC/BTS).

As per **claim 33,** Andersson teaches claim 20, further comprising: detecting termination of an emergency call; and, responsive thereto, enabling the selectively controlling access to the network (figure 3 shows the process of a normal call and an emergency call being completed. The examiner notes that the "enabled/disabled control" process would be "reset" after each-and-every call).

Claims 34 and 40 rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson/Valentine and further in view of Lindgren.

As per **claim 34,** Andersson teaches claim 26, wherein the network element is a radio network controller of a radio access network (figure 1a shows the mobile communicating with a BTS/BSC/MSC).

As per **claim 40,** Andersson teaches claim 39, wherein said disabling includes disabling for a predetermined time period (figure 2d shows Restricted Times, #116D and #118D, which provides a "time range" whereby calls are allowed/denied, hence a time period is taught. A "timer" must be inherently used in order to measure the elapsed time).

Claims 43-44 rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson/Valentine and further in view of Kowaguchi and Choi et al..

As per **claims 43-44,** Andersson teaches claim 35 **but is silent on** further including means for receiving an indication of emergency call on relocation call to access network AND/OR further including means transmitting an indication the emergency call on relocation of the call another access network.

The primary examiner notes that Lindgren does discuss the fact that the user may be roaming (C5, L12-22) and determining the "identity of the locally geographic VoIP call server that should receive the forthcoming call control signals from the mobile phone" which suggests Lindgren does understand that the location of the mobile user is important and must be determined. Also, since the call is an emergency call, a handover (eg. relocation of the call to another network) must be supported as well.

The examiner also notes that **Kowaguchi** teaches a mobile device that can determine it's own location and then use an inhibit table to turn itself Off/On (Abstract), eg. no "network access information" is needed to be received from the network. Furthermore, **Choi** teaches handing off an emergency call (C6, L42-53):

"...*Reference is now made to FIG. 5 wherein there is shown a message flow and network operation diagram illustrating use of an information request message in accordance with the*

*present invention to request call related information following inter- exchange hand-off of an
emergency services call. An emergency services call (e.g., a 911 call) 500 is currently in
existence and has proceeded through a completed inter-exchange hand-off. Thus, both a serving
exchange 502 and an anchor exchange 504 are implicated in handling the call 500 between a
mobile station 506 and an emergency services center 508..."*

It would have been obvious to one skilled in the art at the time of the invention to

modify Lindgren, such that it includes means for receiving an indication of emergency

call on relocation call to access network AND/OR further including means transmitting

an indication the emergency call on relocation of the call to another access network, to

provide means for supporting the emergency call during relocation/handoff.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-

272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dwayne Bost can be reached on 571-272-7023. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

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/Stephen M. D'Agosta/
Primary Examiner, Art Unit 2617